

The Baby Bust in Historical Perspective

by

Herbert S. Klein
Gouverneur Morris Professor of History
Columbia University

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General Trends:

In many ways the term “Baby Bust” is an anomaly, since the fertility decline which the United States has experienced since 1964 has followed closely long term secular trends in American fertility. I will argue in this paper that it is the “Baby Boom” of the 1946-1964 period which is the deviant experience, while the Baby Bust was to be expected, however abrupt and steep the transition to lower fertility which dropped below replacement for the white majority in 1972. The exuberance of fertility in the immediate post-WW II period was an exceptional phenomenon that was quickly replaced by long term trends which would leave the native born United States population below replacement fertility level at the beginning of the 21st century, which was the norm for most advanced industrial societies of the world.

There is little question that the fertility decline which has occurred from 1964 to the present, was part of a systematic secular trend which went back to the early 19th

century (see graph 1). The United States, in contrast to most of the world's population, experienced fertility decline well before the decline of mortality. The so-called Demographic Transition model which postulated that fertility only began a secular decline after a secular decline in mortality, was not the norm for the American Population. American birth rates, which had been high by Western European standards in 1800, slowly declined by 1900 to the relatively low fertility rates of most of the western European countries at that time. Though there were temporary spurts of high fertility, as for example just after the Civil War, these had little impact on the trend. Although there were initially regional and racial differences in birth rates, most of these differences progressively declined over the course of the 19th century. Consistently the western frontier birth rates of native born Americans - which were the highest nationally - declined over time to the levels of the low Eastern seaboard native American populations. Equally all immigrant groups arrived with higher fertility rates than the native-born populations, and they too quickly adapted to the lowest fertility patterns of the native born as well by the second generation. Finally even high Black-American birth rates declined over time though they did not reach native born white rates.

[Insert new graph 1 here]

From 1900 to 2005 this same secular decline in fertility continued and matched that of all the advanced industrial nations of the world. Although the Great Depression of 1929-1940 represented a slight deviation from the trend as severe economic conditions forced couples to produce fewer children than desired. The combination of economic and

military constraints forcing fertility below desired levels to 1945. The post-WW II economic boom, and the delayed childbearing caused by war and depression, were factors which explained the short term deviation of fertility trends known as the “Baby Boom” of 1946-1964 when fertility rose significantly and the age of first marriage, and first births to married women fell to their lowest levels in the modern period.

Many have argued that it was historically unique factors which created the Baby Boom. New post war government social and educational programs, tremendous economic growth with new levels of occupational mobility, and the rise of a suburban housing market all encouraged higher than historical trends in birth rates. As the rates of occupational mobility returned to norm, and the desired family sizes were reached, the next cohort of women entering the marriage market quickly reverted to long term trends. The age of first marriage for women went back to the higher pre-1940 norms and has slowly increased in every year since 1960. Equally the average age of mothers at first births has also risen every year since 1960. What is even more impressive about the post-1960 period is that fertility has declined consistently even as marital fertility has lost its role as the primary determinant of national fertility rates. Traditionally out of marriage births had been well below 10% of all births in the United States as in most Western European countries prior to the middle of the 20th century. But beginning in the period of the “baby bust” not only have fertility rates returned to long term trends, but the origins of births has changed profoundly as never before in our history. What is revolutionary in fact about the post-1960 fertility is not the level of fertility, but that fertility is being carried out within a rapidly changing family structure. The rise of single

parent households, the secular rise in births outside of marriage, are all parts of social change which is new to the United States, and is a phenomenon which has been occurring at roughly the same time in most advanced industrial nations. But even despite the real revolution in the role of the family in fertility, both births within and outside marriage continue to decline.

Fertility in the 19th century:

In 1800 the United States still had very high fertility - higher in fact than the rest of the Western European countries. The crude birth rate was estimated to be approximately 55 births per thousand resident population in 1800, which was equivalent to a total fertility rate of just over seven children per women who had completed their fertility. At this time most of the Scandinavian countries and the UK had a crude birth rate in the upper 20s and lower 30s per thousand population. By 1860 this same resident white population in the United States had reduced its birth rate to 42 per thousand births and lowered its total fertility rate to 5.2 children, a decline of over a quarter (Haines 2000; Coale & Zelnik 1963). This was still a third higher than the equally declining French rate (now at 3.5 children total fertility), but was closing on the relatively high English fertility rate of 4.9 children at that time (Chesnais,1992)

This long term decline of fertility occurred in a nation that was almost 80 per cent rural and one which experienced a death rate that was either stable or rising. In Europe, only France went through this process of declining fertility rates preceding any serious decline in mortality. Almost all other major western European nations imitated the

English example, which maintained stable birth rates for most of the 19th century, and only began to experience declining fertility long after mortality had begun to decline. Thus the United States and France differed from the pattern which demographers have labeled the “Demographic Transition” and which was the experience of most world populations from the 19th century to today. In this transition in the advanced European states, death rates declined and stabilized at lower than fertility rates in the late 18th and early 19th centuries for a variety of reasons related to better nutrition and sanitation. The experience of declining mortality occurred in the developing countries in the mid 20th century and was due both to better sanitation and nutrition and to the use of modern medicines after 1950. Initially the resident population experiencing this change maintains its traditional high levels of fertility which were associated with higher levels of mortality. It is only after two or three generations that the growing rate of natural increase of the local population - reaching 2% per annum in the developed countries of Europe in the 19th century, and over 3% per annum in the developing countries in the late 20th century - leads most people to begin restraining fertility. As pressure slowly builds on land and resources because of the increasingly rapid growth of the population, natives respond by reducing their fertility rates, which in turn leads to a decline in the natural growth rates. This was the pattern in Europe from the late 19th to the early 20th century and was repeated in the developing world countries from the mid 20th century until the early decades of the 21st century. Here the model society used is England, whose increasing urbanization and population density led the local population to begin to curtail fertility only in the last quarter of the 19th century, long after its late 18th century decline in mortality.

Demographers have suggested that the initial pre-1860 fall in fertility in both France and the United States was related to the increasing pressure of population on land and agricultural resources. The adoption of partible inheritance under the Napoleonic codes and the increasing subdivisions of agricultural properties are suggested as possible causes in the French situation along with the long and massive wars suffered by the French in the late 18th and early 19th century. Paradoxically, declining land availability is also suggested as the primary cause in the case of the United States. Though the American frontier was ever expanding, the majority of the population resided in the old eastern seaboard states, and here land resources were on the decline. It was estimated that population density in the original 13 colonies in 1790 was just 9 persons per square mile. By 1820 this had doubled to 20 persons per square mile and doubled again to 42 persons per square mile by 1860. In contrast the new frontier areas added to the Republic by the 1810s held less than 1 person per square mile and those added subsequently to 1860 never reached the density of the original 13 colonies in 1790. This density reflects a declining availability of agricultural land which in turn was the primary factor affecting fertility before the Civil War. After 1860, both in France and the United States, the continuing decline in fertility is tied more to the traditional causes suggested in the classic model - increasing urbanization and industrialization in both countries raised the costs of children in terms of housing and education, at the same time as more possibilities for consumption opened for adults in the industrializing world.

In the pre-1860 period, when the rural population was still well over 80%, the response of Eastern seaboard residents to increasingly limited land resources was to marry later and leave a higher ratio of women outside the marriage market. The former action resulted in the decline in marital fertility. This decline in fertility, first noted as early as the late 18th century in New England, began to appear in the Middle Atlantic colonies in the 19th century. On the frontiers, early marriage and high marital fertility were still the norm, but this ever moving frontier population made up only a small share of the total national population and did not seriously influence the national figures. Not all regions experienced fertility decline at the same rate. The Middle Atlantic colonies received the most foreign immigrants, and these foreign born immigrants had higher fertility rates than the native born. Thus the rate of decline was slower here than in New England. Of the older coastal seaboard regions, the South declined the least, for here falling mortality rates somewhat made up for a declining fertility, and reproductive rates remained above the national average for the entire period to 1860.

It should be stressed that fertility in the United States, although declining, was still quite high and positive. Its decline however quickly translated into lower natural growth rates. In the 1800-1810 period the rate of natural increase of the resident white population was estimated at 2.92% per annum - a rate which even today would be considered high for a rapidly growing developing nation, but this rate dropped slowly but steadily to 1.99% in the decade of 1850-1860. Had it not been for immigration, it is estimated that the 1860 population would have been a quarter smaller than it was on the eve of the Civil War, but it would still have grown impressively (Klein 2004, chap 3).

By the late 19th century as the nation industrialized and the urban population became ever more important fertility decline accelerated and finally reached western European levels by the last decade of the century. Whereas the total fertility dropped 25% from 1800 to 1855, it declined by a third between 1855 and 1900. The post Civil War decline in fertility is now thought to be more related to the demand for education, housing and employment associated with increasing urbanization and industrialization then occurring in the North American society and economy. The escape valve of the frontier migrations with their usually higher rates of fertility was coming to an end and the frontier would cease to exist altogether by the end of the century. The increasing density of western settlement began moving western population fertility rates toward those of the Eastern seaboard. The movement of the national population off the farms and into the cities was also beginning to affect rates of reproduction quite dramatically, as they did in the rest of the industrialized world. Whereas land tenure was considered the most important factor influencing the trend in declining rates in the first half of the 19th century, by the second half of the century, these new factors of urban residence and non-farm occupations were beginning to be more important.

Though there was the usual spike in post-war birth rates in the late 1860s and early 1870s, general fertility rates thereafter continued their long term secular decline for the rest of the century. This declining fertility rate of native born whites was somewhat compensated for by the arrival of European immigrants, who now accounted for between a third and a quarter of the total growth in the national population in this last quarter of

the Nineteenth century. Although immigrants tended to have higher birth rates than native North Americans in the first generation of arrivals, the experience in the 19th and 20th century is that by the second generation their birth rates approached that of the natives. Given their relatively modest importance within the national population, foreign born first generation residents had only a moderate effect on long term fertility trends. The same can be said for the Black fertility rates, which remained higher than that of the whites throughout the 19th century (see graph 2) but which accounted for only a small proportion of total births, since African Americans represented only 14.1% of the population in 1860 and just 11.6% in 1900. By the late 1870s the total fertility rates in the United States dropped to 4.5 children per woman and finally and permanently reached a rate at or below that of the advanced European countries and in line with England itself. The only exception, and a unique one, was that of France which had the advanced world's lowest rates of reproduction for the entire century. (see graph 3).

[Insert graphs 2 & 3 here]

But the question that is difficult to answer for the 19th century, is how did this change in fertility actually occur? Given the fact that births outside marriage remained low in all western societies in the 19th century, then it was marital fertility which was the crucial area in which change occurred. In populations in which contraception was not being systematically practiced, one way of reducing fertility was to raise the age of marriage for women and have more women reach the end of their fertile years without being married, thus eliminating several years of potential fertility and/or reducing the

number of potential mothers. From small samples of 19th century population, this in fact seems to have been the case in the earlier period, but not in the second half of the 19th century. It would appear that the age of first marriage for women was moderately rising through most of the 19th century, though the ratio of women never married was relatively stable. Nevertheless it has been estimated that three quarters of the decline in fertility in the 19th century came from changes in marital fertility rates (due to changes in child spacing and the earlier termination of fertility among married women) and only about a quarter was due to changes in marriage rates - that is in the age of marriage and the ratio of women ever married (Sanderson, 1979). Data from the Mormon genealogical records suggest just this possibility actually occurred among Mormon families in the 19th century. It would appear that once optimal family size was reached, the spacing of children quickly increased and the age of the woman when her last child was born declined. The Mormon data suggest that there was little difference in spacing in the birth of the earliest children, but that when some ideal level was reached, the spacing to the last child increased substantially and the mothers age when she had her last child declined. All this suggests voluntary attempt to control fertility which resulted in last children being significantly different from what one could expect on biological grounds (Anderson and Bean 1985).

In this move toward lower fertility, native born whites were leading the way with declining extended family organizations and declining family size of the nuclear family. This non-born white model was quickly adopted by the arriving immigrants. Not all resident groups moved at the same pace among even the native-born whites. Evidently

elites were more concerned with wealth issues than the poor, and initially the Protestants were more willing to control fertility than were the Catholics. Immigrants were slower to change than natives and rural persons slower to adopt than were the urban residents, though all were moving in the same direction throughout the North Atlantic world by the last quarter of the 19th century.

Fertility in the 20th century:

The trend of declining fertility, which by the late 19th century had brought US rates in line with most of northwestern Europe, continued to move in the same direction in the new century, but at a slower pace and with some sharp variations around the trend due to external events which would influence reproduction on the part of the resident population. The three most important external factors influencing fertility were the Great Depression and the two major wars fought by the United States in the first half of the 20th century. The former economic crisis led to mass unemployment and the decision of many families to postpone child bearing for economic reasons. The two world wars in turn extracted a large share of the young males from within the United States and forced their temporary withdrawal from both the marriage and fertility markets. This initially had a negative influence on childbearing decisions of American families. But in the immediate post war years postponed marriage would cause a temporary rise in fertility due to pent up demand for marriage and children which had been blocked by the war. This was only modestly important in influencing fertility rates after the First World War, but was to be especially important after the second world war, which saw the

mobilization of over double the number of young adult men into the armed forces in the 1941-45 period than had occurred in WW I.

Thus in 1914 the total fertility rate was already declining from earlier late 19th century highs and had fallen to 3.3 children per women who had completed their fertility - a drop of .2 children since 1900. This rate then steadied during the war years, and progressively declined through the 1920s. It reached its low point of just 2.1 children - the number of children considered the bare necessity to replenish the resident population - in the middle of the Great Depression in 1936. Fertility would then slowly reverse its long term decline, but would only climb back to 2.4 children by 1945. But in the immediate post war period, a relative boom in births occurred pushing the fertility rate temporarily back up to very high levels. By 1957 at the peak of the post-war “baby boom” the total fertility rate reach 3.6 children for women who had completed their fertility, a figure even higher than the 1900 rate. But this extraordinary reversal lasted only for a decade and the century long trend of decline would continue as economic growth led families to space their children at longer birth intervals or delay first births even later into marriage.

This longer spacing between children and delaying of first births explains the surprising finding that this decline in fertility in the period to 1945 was occurring at the same time as the age of first marriages for women and men was progressively declining, which should have increased fertility. In 1900 for example, age at first marriage for men was 27.6 years and for women 23.9 years - both at the high end compared to 19th century

rates. By 1940 the age at which men married was two years younger than this and for women it was three years less than their 1900 rates. Moreover these ages at marriage were lower than the norm in Europe at this time except for France, which it greatly resembled. At the same time, the percentage of women never married only modestly changed in this period, slowly rising from 7.8% of the women who reached aged 45-54 in 1910 to peak at 9.1% by 1920, and then declined to just 8.7% in 1940, a trend in declining spinsterhood which would continue to the 1980s. Women would continue to marry at ever younger ages in every decade to 1960, in that year reaching a record setting 20.3 years of age - a level not seen since the colonial period (Haines, 1996). Given the still quite low rates of illegitimate births (just 8.2% of all births for all women in 1930-34, and then dropping to 7.0% of all births in 1940-44), marital fertility itself was seriously declining in this period despite the increasing time women spent in marriages (Bachu, 1999). This was clearly due to the adaptation by men and women in this century of birth control practices within marriage.

The difference between Black and white rates in fertility changed little over the period from 1914 to 1945. Though Blacks would also experience a significant decline in fertility rates, this decline was too modest to close the gap between the races. In fact, convergence between the two rates of fertility would not seriously occur until after 1980. But in one area of fertility, Black women began to experience change well in anticipation of white women. Already by 1930-34 almost a third of first births for Black women were illegitimate, this compared to just 5.9% of all births occurring outside of marriage for white women. Though illegitimate birth rates fell for both races in the period to 1944,

after 1945 the rates would reverse and begin their long steady climb, here in the United States, as in all the advanced nations of Europe as well. But the pace of growth was much more rapid among Black women than white women.

One group that was slow to drop its fertility were the native American Indians. Though there was variation from tribe to tribe, the native Americans had the nation's highest level of women ever married and the nation's highest total fertility rate in 1900 - on the order of 6 to 7 children per women who had completed their fertility. But they also had higher mortality rates than any other group in the population, and their high fertility seemed to be maintained more by early and universal marriage of women than by higher fertility within marriage. In fact, Indian women probably had a higher ratio of diseases which affected fertility which may account for their very long spacing between childbirths - much longer than for native whites or blacks. But as their economic situation finally stabilized with the end of the frontier changes in the 1890s, and the slow but progressive immunization of their children and adults occurred in the first decades of the 20th century, their very high mortality rates finally began to fall and in turn would lead to ever higher growth rates in the native population. Given the delayed pattern of these mortality changes, fertility decline was also delayed among the Indians. The result was that population now expanded quite rapidly at 1.33% per annum for the continental Indian Population between 1900 and 1960, when the population was now double that of the 1900 nadir population. Though fertility slowly declined, even as late as 1940, the total fertility rate was 4.5 children for Indian women who had completed their fertility -

two children more than black women and almost 3 more children than white women had in that year (Shoemaker, 1999).

In contrast to the black and American Indian patterns, there was rapid convergence between foreign born immigrant and native born white birth patterns in this period. Soon after their arrival, foreign born white women began to move quickly toward the native-white woman norms. In a study of native and foreign born whites in Chicago from 1920 to 1940, the spread between the native and foreign born population in terms of total fertility was constantly decreasing. Moreover this decline occurred for all income groups, and was most rapid for the richest immigrants. In fact by 1920 these wealthy immigrants had a lower rate of fertility than native born whites in their same socioeconomic class (Kitagawa, 1953). The same occurred in Detroit between 1920 and 1930, when the foreign born women in all age groups lowered their fertility much more rapidly than did the native-born white women, and their experience was the most important factor driving down overall birth rates in the city (Mayer and Klapprodt, 1955). In a detailed analysis of the Italian immigrants to the United States in the late 19th and early 20th century, Livi Bacci found that immigrant families were quickly adapting to the reduced native born white birth rates. In fact, he found that younger mothers (under 34 years of age) who had been born in Italy - who had fertility rates almost double that of native born whites in 1920, had fertility rates at or below that of the native born whites by the late 1930s. He also estimated that between 1910 and 1940, the fertility of almost all immigrant groups at all ages (except for the Italians and the Mexicans) fell more rapidly than for native-born white women, though none surpassed the low fertility rate of the

native-white women. But at the younger ages for these foreign-born women (that is from 15 to 34 years of age) he estimated that already half of the major immigrant groups in these same thirty years had already achieved lower fertility rates than that obtained by the native-born in this age category (Livi Bacci, 1961). In the United States as a whole it is estimated that of the three basic groups of the population, that is native born whites, non-whites and foreign born whites, the later decreased at double the rate of the other two groups. Whereas fertility for women 15-44 between 1920 and 1929 for the entire United States was estimated to have fallen by 20% for native born whites, it fell by almost a third for the foreign born and just 18% for blacks (Thompson and Whelpton, 1933). In another estimate of fertility by origin, it was suggested that the period 1910-14 showed the largest spread in fertility rates between native-born and foreign-born whites since such data was available from 1875-79. But that it then fell so rapidly that by 1925-29 the fertility of the foreign born population was actually below that of the native born whites for the first time ever (see graph 4). Moreover this pattern of initially higher fertility rates of the foreign born and their progressive decline to at or below the level of the native born is noted in every study and for every group arriving in the United States in the 19th and 20th century, including even the Mexicans in the most recent period. No matter if the immigrants came from Europe in the early 1900s or would come from Latin America or China in the 1980s, the pattern held over time and place.

[Insert Graph 4 here]

The Baby Boom:

Unquestionably the event which most defined this period in the popular perception and even in the historical literature was the sudden post war shift to higher fertility which created what has come to be called the “Baby Boom.” Because this boom in births was immediately followed by a return to low fertility, which has been called the “Baby Bust,” it has meant that those born in this period were a well defined cohort that could be easily identified as they grew older and they have come to be known as the generation of the “Baby Boomers.” The question that intrigued the demographers at the time, was why had this massive shift occurred and was it permanent. Was the United States, now one of the world’s wealthiest societies, about to enter a new era and create a unique model of high fertility in an advanced industrial society, something no other comparable society was experiencing in this period? While everyone expected a temporary post-war shift in fertility, initially it seemed as if this would be a permanent change in attitudes toward fertility and family life. It is now seen that this shift in the direction of fertility was to last for only some eighteen years, but its impact on the nation was to last until well into the 21st century as the “baby boom” generation worked its way through the labor market and into the retirement ages in the first decades of the new century.

There are numerous reasons suggested for this massive shift. First of all the Depression years had driven fertility rates to levels below trend and clearly reflected economic constraints on what people wanted in terms of family size. The easing of that economic crisis on the eve of the Second World War allowed the fertility rates to start

moving slowly upward, which were then temporarily repressed by the withdrawal of so many men from the marriage market because of national conscription. The return of these men after 1945 then allowed the rate to rise again. But the fact that it began rising ever faster at the end of the 1940s and throughout the decade of the 1950s and did not peak until the early 1960s was the result of a shift in expectations and possibilities on the part of the young women and men who were then entering into marriage.

The factors which clearly changed traditional family expectations according to Esterlin was the unprecedented post war economic expansion combined with rapid socioeconomic mobility. This economy favored young adults as never before. First of all a rapidly expanding post-war labor market was absorbing a generation originating in the low fertility period of the late 1920s. This would create a tight labor market which in turn would push up wages. There was also a massive government subsidization for adult education in the immediate post-war years, through the GI Bill, which resulted in a major increase in years of schooling for an large share of the population which would never have been able to afford that schooling. These two factors help to explain a major shift of young workers into higher status and better paying jobs. It is now estimated that median male income in the decade from 1947 to 1957 grew at 5% per annum in current dollars. This increasing income and the increasing availability of government housing credit for mortgages also explains an explosion of home ownership which went from 44% of the total population to 64% between 1940 and 1980 (Esterlin 1961).

The demand for children was also strong as millions of returning veterans brought with them a pent up desire for family formation in 1945. New levels of family income, new availability of federal credit to the middle and lower classes for home ownership, the introduction of cheap mass produced tract housing and increasing economic mobility due to the movement to higher status employment on the part of the younger population, all had their impact on temporarily reversing the trends in fertility. The space and income for providing for more children was now available and Americans responded to these opportunities by lowering the age at which they married, beginning their families at an earlier age, and opting for marriage more frequently, thus increasing their overall fertility (see graph 5). In 1940 the mean age at marriage for men was 24.3 years of age and for women it was 21.5 years. By 1956 it had declined to 22.5 years for men and to just 20.1 years for women - the former being probably the lowest age ever recorded for men in the United States as a whole, and the later rate being the lowest age of first marriage ever recorded for women in the 20th century and probably one of the lowest such ages ever experienced by the American population. It was a rate in fact which would not be sustained in the following years as age at first marriage would begin slowly rising again and would reach 25 years for women by the end of the century. At the same time, the ratio of women 20-24 who were married reached an all time high of 70% in 1960, a rate which would quickly decline again to just 32% by 1990 (Haines, 1996). The number of women who remained unmarried throughout their lives dropped considerably in the period of the baby boom and reached the lowest levels in this period. Whereas in 1900 almost a third of the women over 15 years of age were never married, by 1950 the rate had fallen to 18% and to 17% by 1960 - again rates which would be reversed in the

following period. Finally the median age of first births also dropped to its lowest level in this period. In 1930 women had their first child at 21.3 years and by 1956 this had declined to its lowest recorded level in the century at just 20.3 years. This too would reverse in the subsequent years as the median age of mothers having their first child reached 25 years of age by the end of the century. Finally the spacing between marriage and first child, and then between the first and second children dropped to their lowest levels in the period from 1930 to 1970 in the first half of the 1960s, again beginning a long term reversal by the second half of that decade (Klein 2000, chapt. 6).

[Insert graph 5 here]

All of these changes in behavior explain how this new level of fertility was achieved. The total number of children produced by women who had completed their fertility went from a low average of 2.1 children in 1936 to an extraordinary high average for a modern industrial society of 3.6 children in 1957 - a rate not seen in the United States since 1898. This of course meant that median age of the entire population by 1970 had dropped to 28.1 years, the lowest since 1930 and far below the median of 35 years for all sexes found in the population in the census of 2000. At the same time the ratio of the economically active population dropped below 60% in 1960 for the first and only time in the 20th century because of the large jump in births. All this had a direct impact on creating a very large cohort of population which slowly worked their way through the population pyramid, and become a conspicuous cohort as the generations which followed, came from a generation of lower birth rates. These changes can be seen

in age pyramids of the period. In 1940 the low births in the Great Depression truncated the younger ages of what should have been a normal pyramid (see graph 6), by 1950 a big increase in births was showing up as a very large increase in the two youngest age groups (0-9), and this child and infant base kept expanding in the next decade. Then came the decline in fertility and the age pyramid of 1980 began to look again like that of 1940 in the bottom ages. The big difference from thirty years previously, however, was the bulge in the teen and young adult ages caused by the huge influx of baby boomers working their way through the age structure. By 1980 this baby group was being replaced by a smaller birth cohorts of 0-14 years old and in turn was bulging out at the ages 15-24, and moving steadily toward middle age and retirement by the beginning of the 21st century.

[Insert graphs 6 here]

The Baby Bust and Return to Trend

But the “baby boom” was just that - a deviation in long term trends that was due to a set of unusual factors which all came together at the same time to reverse long term trends in fertility decline. After just two decades, Americans were back again to marrying later, producing children later and having fewer children. Whereas Gallop polls found the majority of women desiring 4 children in 1945, 1957 and 1966, by 1971 women who desired this number of children were in the minority. Equally attitudes toward sex itself were changing abruptly in this period as those who opposed premarital sex dropped from 68% in 1969 to 48% in 1973 in these same public opinion surveys

(May, 1988). Given this sea change in attitudes, along with changing economic conditions, each succeeding generation after the 1960s reduced their fertility to such an extent that native born white Americans quickly reached the low fertility norms of the advanced industrial world and by the last decades of the 20th century differed little from their peers in Northern Europe. By 1972 the total fertility rate of white non-hispanic women who had completed their fertility dropped for the first time to below replacement level - or just 1.9 children per woman - a rate which, though fluctuating and even reaching 1.6 children in 1978, would not return to even the theoretical replacement level of 2.1 births per women to the present day (US Statistical Abstract, 2004, p.63).

Along with declining fertility there was a profound change in the role of the family in fertility. Although the family values and the dominant role of young married mothers in the fertility of Americans reached its peak in the period of the “baby boom,” the post 1964 period was a time not only of historically low rates of fertility, but a period when the American family was beginning to lose its overwhelming importance in society and even in controlling fertility itself. Between rising rates of births outside of marriage and of divorce, the family began to lose its role as the predominant determinant of fertility and of household organization. Births out of wedlock progressively reduced the importance of marital fertility over time and the rising rates of divorce was one of the key factors favoring the increasing importance of single parent headed households which contained young children. In turn the increasing reluctance of young women to marry would also influence the rise of single person households throughout America. Thus as early as the 1970s, the United States was beginning to experience a profound change in its basic social structure. Whereas the ratio of births outside of marriage to total births

remained at 10% or below to 1965-69 - its historic rate - by the next quinquennium it was up to 15% of births and by 1975-79 it had reached over a quarter of all births and was still rising. Moreover, these parents of extra-marital children now had a greater tendency not to marry either before or after the birth of the child. Whereas half the illegitimately conceived children saw their parents marry in the pre-1970 period, only a third did so in the late 1970s and that rate kept dropping. Equally divorce rates doubled between 1900 and the 1960s going from 4 divorces per thousand married women in 1900 to 9 divorces per 1,000 married women by 1960. Then from 1967 through 1975 no-fault divorce laws were universally adopted in almost all the states, and the rate in the post 1960 period jumped to an average of 20 per thousand married women at the end of the century. Between 1950 and 1980, the number of divorced persons in the adult population 15 years or older grew at the steady 5% per annum, accounting for over 7% of the total adult female population and 5% of the male population by 1980 (see graph 7). One estimate suggested that by 1967 half the marriages contracted in that year would end in divorce, while a more recent estimation gives a slightly lower figure, suggesting that four out of ten marriages contracted in the year 2000 will end in divorce.

[see graph 7 here]

Much of this shift was due to major changes in socioeconomic mobility and the national economy in the post 1960 period, and to some basic changes in attitudes toward the role of women within society. Female labor force participation rates began to climb in this period and women began entering professions at a rate never before experienced.

In 1950 only 34% of adult women were in the labor force, by 1970 it was 43% and by 1978, half the adult women were working, a ratio that kept increasing every year thereafter reaching over 60% by the beginning of the 21st century (see graph 8). Equally, as might be expected after an unusually rapid growth and restructuring of the economy in the immediate post war period, the secular mobility of these years - when most people increased their status from that of their parents - was now replaced by the more traditional circular mobility, when as many people moved down the socioeconomic ladder as moved up.

[Insert graph 8 here]

While fertility moved back after 1964 to its long term secular trend of decline, a pattern common to all industrial societies, women's role within the household and in the marketplace now began to change in profound ways never seen before. Women now entered the universities in ever larger numbers, thus delaying marriage. In turn they began to enter professional careers at an unprecedented rate and to keep working at those careers longer than ever before. They also moved into households either alone or with a non-married companion with increasing frequency. The cause for this change has much to do with the changes in attitude toward the place of women in society that took place in the 1960s and 1970s when traditional values were rejected by lead elements in the generation coming of age in this period. The introduction of the birth control pill in the early 1960s was important in this change in giving women complete control over their own fertility. But even more important was a new attitude toward the equality of women in the society as a whole. By the 1960s there came a spate of legislation against sexual

discrimination in the work place by a federal government made aware of this issue as never before.

We can see this evolution of new attitudes toward and by women demographically in many ways. There was, first of all, a major change in the education of women which became manifest in this period. Women had always done well in primary and secondary education. In the mid-19th century when the first comparable data became available, women already were more likely to be secondary school graduates than men, and for most of the period since then more women made up more of the secondary graduating class than men. But it was only in 1980 that women finally became more than half of all college students, and it was only in 1984 that they finally represented the majority in graduate school enrollment as well. Even so, the progress in this area has been much slower and they have yet to pass men in enrollments in post-college professional education. They also began to move into the labor market in ever higher numbers, and to remain in the labor market at higher rates than ever before. At the end of the 19th century less than a fifth of all women were in the salaried labor force, by the 1980s the figure had risen to 60%. But this was not a linear trend. In fact female participation rates and the ratio of single and married women in the labor force probably dropped to their lowest point in the 1920s and only reversed that trend in a significant way with World War II. Both the rates of older women returning to work and younger ones entering the market increased dramatically in the 1960s and were one of the forces behind the equal pay movement. Whereas in 1940 among adult women only 14 % of those who were married and 46% of those who were single were in the work force, by

1980 half the married women were working and almost two thirds of the single women were earning their living (Klein 2000, chapter 6; and Goldin, 1990).

Even within marriage, there were important new trends. Ever since the late 1960s the age of women contracting marriage was once again on the rise increasing by 4.8 years by the end of the century. Not only were Americans marrying later, but they were not getting married as much as they had in previous eras. Among all races and sexes, persons over 15 years of age, the ratio who had never married was slowly rising, reaching a third of the men and a quarter of women by the end of the century. Broken down by race, the changes among the whites was occurring at a slower pace than among the blacks, though both saw unmarried rates rising. By century's end, some 22% of adult white women had never married, compared to 42% among adult Black women.

All this, of course, was having its impact on the structure of households and the relation between families and households. Non-family households had always existed as a small share of the total households in the United States, usually made up of elderly persons with no families left. But now they were being formed by young adults, many of whom never married. Moreover the ratio of two parent households even in family households with children was on the decline, as the ratio of single parent plus children households was on the rise. The rapidity of this change is evident when one looks beyond this period. As late as 1960, at the height of the Baby Boom, married families made up 74% of all households, whereas by the census of 2000 they accounted for just over half (53%) and were on a long term trend of decline (see graph 9). In turn non-

family households now accounted for 31% of all households, having risen from just 11% of all households at mid century. This figure, moreover, was quite high compared to the other advanced industrial countries.

[Insert graph 9 here]

Married couples were also no longer the norm for even households with children. Households with children under 18 years of age probably experienced the most change in the second half of the 20th century. The number of two parent families that made up such households with children was steadily on the decline, falling by 20% from 1950 to 2000, and accounted for just under four fifths of such households in the census of 2000. At the same time, families headed by a single parent had climbed in the opposite direction reaching 27% of all such families at the same time. Though the trend for all groups was the same, the Black population experienced the fastest decline of dual parent family households and by the end of the century married couples with children accounted for only 39% of all Black family households with children. But as the general figures indicate, no group was immune to this fundamental shift of declining two parent households (see graph 10).

[Insert graph 10 here]

Not only were married families and families in general on the decline, with the consequent rise of single person and childless couple households, but there was also

important accompanying shifts in fertility. Though the extremely low total fertility rates of the mid 1970s were somewhat reversed in the 1980s and 1990s, the total fertility rates barely reached replacement and fluctuated between 2.0 and 2.1 children per women who had completed their fertility by the end of the century. In fact this overall national rate masked a continued severe decline in the total fertility rate of non-Hispanic white women, who by 2000 were averaging just 1.8 children - even lower than the rate they had in the mid 1970s. Among all groups it was only the Hispanic women who were significantly above replacement level (see graph 11). Even among the Hispanic women, it was essentially the Mexican women, the largest single group, which maintained very high fertility rates. Cuban American women were close to the non-hispanic whites and the Puerto Rican women were closer to the patterns of fertility practices by non-hispanic black women (see graph 12).

[Insert graph 11 & 12 here]

There were also the beginnings of a profound change in the role of marriage in fertility. This was made evident by the rise in births outside of marriage as married women no longer remained the exclusive arbiters of fertility in the United States. Though all groups experienced this growth, non-hispanic whites experienced a slower rise than all other groups, but even they had illegitimate rates of 28% by 2000. What is impressive is that these were probably the highest recorded rates for any period in American History, and despite all the talk of these rates declining, the increasing illegitimacy rates in Europe suggest that North America is

following European trends. Though initially illegitimacy appeared among the poorest elements in the society, the fact that wealthier groups also began to experience these rising trends in births outside of wedlock when the economy was stable if not growing, suggests that by the late 20th century this trend was due to changes in cultural norms and attitudes and the changing role of women in society. This can be seen in the shift in the relative rates of illegitimate births by age. In the 1970s when the issue began to be perceived by the public as one of major concern, it was the teenagers who had the highest rates of births outside of marriage, and these births seemed to be rising at the time. But by the end of the century it was the older women whose rates of illegitimacy was highest and rising while those for the teenage girls was falling (see graph 13) , and actually total teenage births was declining as well (Klein, 2000, chapter7).

[Insert graph 13 here]

That this increase of births outside of marriage was not due to poverty per se can be seen in the fact that the United States was not unique in this new pattern of births and the declining importance of traditional marriage. Other wealthy countries as Sweden also experienced this trend. Although Sweden at mid century still had a low rate of just 10% illegitimate births, by the end of the century its rate of non-marital births had reached 53% of all births. Even such Catholic countries as Spain and Portugal had arrived at a 16% and 22% illegitimacy rates respectively and France was up to 38% of its total births being defined as illegitimate by 1996. Although Italy was still quite low, almost all western European advanced industrial countries were experiencing a steady and unabated

rise in illegitimate births in this period. Thus the belief that this was a temporary or uniquely North American development does not appear to be the case. The factors influencing these trends everywhere in the modern industrial world seem to be the same - late marriages, women increasing their participation in the work force, with resulting higher incomes for women, and changing beliefs in the importance and necessity of marriage. These were beliefs and changes which seem to be general phenomenon affecting all Europe and North America at approximately the same time.

In fact even among dual parent households with children, the traditional family with a single male breadwinner working alone to sustain the family, was no longer the norm. By the end of the century, only 1 in 5 married couples had just a single male breadwinner working outside the home. Even the traditional family model of the stay at home mother was not the norm for families with children. Although the ratio of families with the fathers working and mothers staying at home was higher among these families, even in this subsection of married couples, the traditional model no longer accounted for the majority of such families. Among married couples with children, only 28% had just a father alone in the workforce, and even for families with children under 6 years of age, only 36% had the mother staying at home with the children and not working. That this pattern was not to be reversed anytime soon is indicated by the fact that the trend of male breadwinners as the only support of the family was down for all of this period and these rates were the lowest recorded in the last part of the century (see graph 14). Not only were more women in the work force - a ratio that was constantly on the rise through the second half of the century - but even the vast majority of married mothers with young

children were working outside the home by 2000. Even for women who had given birth to a child during the previous year, the majority at the end of the year were found to be working outside the home - a rate of 55% of them in 2000 compared to just 31% in 1967.

[Insert graph 14 here]

All of these changes had their impact on fertility. Not only was formal marriage no longer the exclusive arbiter of fertility, but more and more women were reducing the number of children they did have. This was not due to women forgoing children. In fact, there was little change in the number of women going childless, which has remained quite steady for the past forty years. Nor was it due to declining sexual activity, since sexual activity of teenagers was on the rise and many more women in the 1990s were having sexual relations outside of marriage than had ever been the case just thirty years before. This decline in fertility was due to the fact that women were deliberately deciding to have fewer children. They were marrying later, thus reducing their marital fertility, they were beginning childbearing at ever later ages, they were spacing their children farther apart and were terminating their fertility at earlier ages. Not only did the average age of mothers having their first children rise by 2.7 years from 1960 to 1999, but it rose significantly for every subsequent child being born as well, while the spacing between children also increased. Although the average age of mothers at first birth for the entire population was now 24.9 years, for non-hispanic white women it was 25.9 years. From 1950 to 2000, the number of live births for each age category declined by over half, with the biggest decline occurring in the 25 to 39 age group. As was to be

expected from the fertility declines, the size of families with children was declining as well. The average number of children in families which included children went from 2.4 children in 1965 at the height of the Baby Boom to just 1.9 children in 2000.

Women were carrying out these changes in their fertility through a variety of methods. They were making more systematic use of contraceptives and legal abortions. It is estimated by the end of the century, that almost two thirds of all women 15-44 used some form of contraception. Although only a third of the teenagers used some method of birth control, by the time women were reaching the crucial fertility years (after 24 years of age) over 70% of them were using contraceptives. This pattern of rising contraceptive use over time was common to all racial and ethnic groups. Although legal abortion rates rose initially, and reached as much as 43% of the total of live births in the mid 1980s, by the late 1990s they were down to 34% of all births and falling. For the whites the fall was quite dramatic, reaching just a quarter of white births at the end of the century. Black abortion rates however, once rising to the 65-70% range in the earlier years, did not decline, and remained steady throughout the period (see graph 15).

[Insert graph 15 here]

Although the impact of legal abortion may have repressed the birth rate somewhat in the early years, the decline of abortions at the end of the century has not reversed fertility rates. These have continued to decline from the 1960s onward. From 1980 to

2000 the crude birth rate dropped from 24 per thousand resident population to just 15 per thousand. Although almost all groups experienced this decline, it was in fact the non-hispanic whites who experienced the lowest birth rate for any group in the population, reaching a crude birth rate of just 12.2 births per 1,000 non-hispanic white residents. Blacks, and American Indians, also among the highest fertility groups also experienced similar declines. The one group that stands out against the trend are the Hispanics whose rate actually increased to 25.1 births per 1,000 residents of this group in the national population. Though Cuban and other non-Mexican Hispanics tended to have low birth rates, this was compensated for by the Mexicans who were both the single most important part of the Hispanic population, and had overwhelmingly the highest birth rates of any group in the country. Thus, in certain urban regions, in the coastal and frontier states, the importance of the Mexicans, compensated for the declining fertility rates of the native born populations.

In the context of the declining birth rates of the native born non-Hispanic whites, the net arrival of foreign born now accounted for 39% of the natural growth of the American population. The impact of Hispanic birth rates while maintaining the positive growth of the national population, only slowed somewhat the aging of the American population, which was a process occurring in all the advanced industrial societies. Given the low fertility rates of the dominant non-Hispanic white population, the aged were becoming an ever more important element in the society. Together with a rising life expectancy, the fertility and mortality trends at the end of the 20th century were transforming the age structure of the national population in profound ways. First of all

the mean age of the population was progressively rising along with the share of the population of persons in the older age groups. In the last twenty years of the century the median age of the national population rose 5.3 years to reach 35.3 years of age (Hobbs & Stoops2002). At the same time, there was a steady growth of the ratio of the population over 65 years of age which went from 11.3% of the population in 1980 to 12.4% in the latest census. Although this was still slightly behind the European rate of 15.5% at the end of the century, it is projected that the United States will reach that rate by 2010 and that the elderly will make up 20% of the population as early as 2030 (Kinsella & Velkoff, 2001).

Future Trends

By the first decade of the twenty-first century America looked like most of the advanced industrial nations of the world in terms of its fertility patterns. Its native born non-Hispanic white population had fertility rates which were below replacement level like most of the populations in the advanced industrial world, but thanks to its minorities the total fertility rate was still above 2.1 children. In the trends in fertility, illegitimate births, and abortion rates not only was the United States moving more into conformity with the rest of the world, but its internally divided population was also converging toward these common patterns, whether whites, Blacks, American Indians, Asians or Hispanics.

The question remains, however, will these low rates of fertility continue. Since 1972 the non-Hispanic white fertility rate has been below replacement, but it has

fluctuated going from a low Total Fertility Rate of 1.6 children in 1978 to a current estimated rate of 2.0 children in 2004. In the government's latest projections on fertility by race and ethnic group, both the middle and upper estimates suggest that the national population will return to above replacement levels by 2025 thanks to the still high - though declining rate of births for Hispanics and a modest return to higher fertility of all ethnic groups except Blacks and Non-Hispanic whites. For these two groups, only the highest estimates project a potential return to above replacement rates - and even then rates which are at or below 2.3 children (see graph 16). Given that there could be changing attitudes towards births (if not toward marriage) on the part of the major racial and ethnic groups of women in the population, there is no guarantee that fertility will continue to remain at below replacement levels forever. Given the rising rates of births out of wedlock, it is evident that changes in age of marriage will have much less impact than ever before on fertility and that the primary determinant will be women's attitudes toward fertility. This could be influenced by a number of both economic and social considerations. Recent studies have suggested, for example, that after a certain period in fertility decline, labor market participation rates and even increases in educational level of women no longer have an automatically negative correlation with fertility and in fact reverse their traditional relationship (Castles 2003). Also all surveys of women about the desired number of children they wished to have in their lifetimes, both in the United States and the other advanced industrial countries, continue to suggest that a two child family is the norm. Yet in all of these societies the desired family size is above the actual fertility rates - the reverse of what was the norm in the pre-transition eras. But demographers are still unsure what this disparity means and if the desired rate could in

fact even be promoted by more active pro-natalist government policies (see Bongaarts 2001, Livi Bacci 2001 and Chesnais 2001). But it is also evident that the fertility rates of all groups have moved in the same direction in recent years, and that even the Mexican American women have started to approach the dominant American rates. Thus the Baby Bust would seem to be the norm for the foreseeable future, and even if these trends were reversed, fertility as currently projected in the most optimistic estimates, would rise to only modest levels above replacement.

[Insert Graph 16 here]

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